

Annexure-II

List of practical (Fundamentals of C Programming -24CSE0107)

S.No.	Practical	CLO Level
	Discussion on uploading and managing C Programming Lab Practical on GitHub using GitBash/CMD.	CL0-01
1.	Install C compiler (GCC/Code::Blocks), set up IDE, compile and run the first "Hello, World!" program.	CLO01
2.	Write a Program to show the use to input (Scanf)/output (Printf) statements and block structure of C-program by highlighting the features of "stdio.h".	CLO01
3.	Write a program to add two numbers and display the sum.	CLO-02
4.	Write a program to calculate the area and the circumference of a circle by using radius as the input provided by the user.	CLO-02
5.	Write a Program to perform addition, subtraction, division and multiplication of two numbers given as input by the user.	CLO-02
6.	Write a program to evaluate each of the following equations. (i) $V = u + at$. (ii) $S = ut + \frac{1}{2}at^2$ (iii) $T = 2*a + \sqrt{b+9c}$ (iv) $H = \sqrt{b^2 + p^2}$	CLO-02
7.	Write a program to swap two variables: a) By using temporary variable. b) Without using temporary variable	CLO-02
8.	Write a Program to find the greatest among three numbers using: <ul style="list-style-type: none">• Conditional Operator• If-Else statement	CLO-03
9.	Write the following programs using switch case statement: <ul style="list-style-type: none">• To check that an input alphabet is vowel or consonant• To check whether a number is positive, negative or zero	CLO=03
10.	Write a program using while loop to print the sum of first n natural numbers.	CLO-03
11.	Write a program to check a number is Armstrong or not using For loop.	CLO-03
12.	Write the program to count the digits in a number and then print the reverse of the number also.	CLO-03
13.	Write a program to generate the Fibonacci series.	CLO-03
14.	Write a program to print the following patterns: a) * * * * * * * * * * * * * * * b) * * * * * *	CLO-03

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15.	<p>Write the program to print the following pattern:</p> <table style="margin-left: auto; margin-right: auto;"> <tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td></tr> <tr><td>2</td><td>4</td><td>6</td><td>8</td><td>10</td><td>12</td></tr> <tr><td>3</td><td>6</td><td>9</td><td>12</td><td>15</td><td>18</td></tr> <tr><td>4</td><td>8</td><td>12</td><td>16</td><td>20</td><td>24</td></tr> <tr><td>5</td><td>10</td><td>15</td><td>20</td><td>25</td><td>30</td></tr> <tr><td>6</td><td>12</td><td>18</td><td>24</td><td>30</td><td>36</td></tr> </table>	1	2	3	4	5	6	2	4	6	8	10	12	3	6	9	12	15	18	4	8	12	16	20	24	5	10	15	20	25	30	6	12	18	24	30	36	CLO-03
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16.	Write a program to check that the given number is prime, Armstrong or perfect using the concept of functions.	CLO-03																																				
17.	Write a program to calculate the area and circumference of a circle using functions.	CLO-04																																				
18.	Write a program to swap two variables using the concept of call by value and call by reference.	CLO-04																																				
19.	<p>Write a program to perform the following operations on 1D-Array:</p> <ul style="list-style-type: none"> • Insert • Update • Delete • Display • Search 	CLO-05																																				
20.	Write a program to calculate the sum of array elements by passing it to a function.	CLO-04																																				
21.	Write a program to show the use of passing pointer as arguments to the functions.	CLO-04																																				
22.	Write a program matrix multiplication using the concept of 2D array	CLO-05																																				
23.	Write a program to transpose a given matrix.	CLO-05																																				
24.	Write a program to find the factorial of a number by using the concept of recursion.	CLO-05																																				
25.	Write a menu driven C program to show the use of in-built string functions like strlen, strcat, strcpy, strcmp, strrev etc.	CLO-05																																				
26.	Write a Program in C to display the total number of appearances of a substring provided as input by the user in a given string.	CLO-05																																				
27.	Write a program to display the sum of the digits of a number by using the concept of recursion.	CLO-05																																				
28.	Write a C program to add two distances in inch & feet using the concept of structures.	CLO-05																																				
29.	Write a C program to add two complex numbers using the concept of structures in C.	CLO-05																																				
30.	Write a program in C to store the information of five employees using both concepts i.e. array of structure and array within structure.	CLO-05																																				
31.	Write a Program in C to find and replace a specific string in a file and also display the total number of appearances of that string.	CLO-06																																				